

WHAT IS CLAIMED IS:

1. A combined sewer pipe apparatus for conveying sanitary effluent and storm water from sources to a treatment plant comprising:
 - 5 a larger diameter first sewer pipe adapted to carry storm water and having an interior surface;
 - a smaller diameter second sewer pipe adapted to carry sanitary effluent and extending through said first sewer pipe; and
 - a fastener means attaching said second sewer pipe to said interior surface of said
 - 10 first sewer pipe.
2. The apparatus according to claim 1 wherein said second sewer pipe is formed of an HDPE material.
- 15 3. The apparatus according to claim 1 wherein said fastener means is one of a grout material and an adhesive material.
4. The apparatus according to claim 3 wherein said fastener means includes a plurality of fasteners spaced along said second sewer pipe engaging an exterior surface of
- 20 said second sewer pipe and being attached to said first sewer pipe.
5. The apparatus according to claim 1 wherein said fastener means includes a plurality of fasteners spaced along said second sewer pipe engaging an exterior surface of said sewer second pipe and being attached to said first sewer pipe.
- 25 6. The apparatus according to claim 5 wherein said fasteners are formed of a plastic material.
7. The apparatus according to claim 5 wherein said fastener means includes an
- 30 adhesive material attaching said fasteners to said first sewer pipe.

8. The apparatus according to claim 5 wherein facing surfaces of each of said fasteners, said first sewer pipe and said second sewer pipe form a pair of spaces including one of a grout material and an adhesive material filling said spaces.

5 9. The apparatus according to claim 5 wherein each of said fasteners has an arcuate central portion extending between a pair of end portions, said central portion being shaped to conform with a part of an exterior surface of said second sewer pipe and said end portions being shaped to conform to said interior surface of said first sewer pipe.

10 10. The apparatus according to claim 1 including a liner extending through said first sewer pipe, said second sewer pipe being positioned between said interior surface of said first sewer pipe and an exterior surface of said liner.

11. An apparatus for separating sanitary effluent from storm water in a sewer pipe
15 comprising:

 a sanitary sewer pipe adapted to carry sanitary effluent and sized to extend inside
 an outer sewer pipe adapted to carry storm water and having an interior
 surface; and

 a fastener means for attaching said sanitary sewer pipe to the interior surface of
20 the outer sewer pipe.

12. The apparatus according to claim 11 wherein said sanitary sewer pipe is formed of an HDPE material.

25 13. The apparatus according to claim 11 wherein said fastener means includes one of a grout material and an adhesive material.

14. The apparatus according to claim 11 wherein said fastener means includes a plurality of fasteners spaced along said sanitary sewer pipe for engaging an exterior
30 surface of said sanitary sewer pipe and adapted to be attached to the interior surface of the outer sewer pipe.

15. The apparatus according to claim 14 wherein said fasteners are formed of a plastic material.

16. The apparatus according to claim 14 wherein said fastener means includes an
5 adhesive material for attaching said fasteners to the outer sewer pipe.

17. The apparatus according to claim 14 wherein each of said fasteners has an arcuate central portion extending between a pair of end portions, said central portion being shaped to conform with a part of said exterior surface of said sanitary sewer pipe
10 and said end portions being shaped to conform to the interior surface of the outer sewer pipe.

18. A combined sewer pipe apparatus for conveying sanitary effluent and storm water from sources to a treatment plant comprising:

15 a larger diameter first sewer pipe adapted to carry storm water and having an interior surface;
a smaller diameter second sewer pipe adapted to carry sanitary effluent and extending through said first sewer pipe adjacent said interior surface; and
a fastener means attaching said second sewer pipe to said interior surface of said
20 first sewer pipe, said fastener means including a plurality of fasteners spaced apart along a length of said second sewer pipe and engaging an exterior surface of said second sewer pipe and an adhesive material attaching said fasteners to said interior surface of said first sewer pipe.

25 19. The apparatus according to claim 19 including a liner extending through said first sewer pipe, said second sewer pipe being positioned between said interior surface of said first sewer pipe and an exterior surface of said liner.

20. The apparatus according to claim 19 wherein said second sewer pipe is
30 formed of an HDPE material.